

REMARKS

Applicants acknowledge with appreciation Examiner's allowance of claims 5-23 and 25-29.

Method claims 1-4 stand rejected under 35 U.S.C. § 112, first paragraph for purportedly being non-enabled by the specification. The Examiner contends that the specification is not enabling for identifying antimicrobial activity of any and all peptides. In view of the amendments to the claims and the following remarks, applicants respectfully request that the Examiner reconsider and withdraw the rejection.

The issue of enablement requires determination of whether a person skilled in the pertinent art, using the knowledge available to such a person and the disclosure in the application, could make and use the invention without undue experimentation. It is not fatal if some experimentation is needed, for the specification is not intended to be a production specification.

The claims as amended are directed to a method for identifying antimicrobial peptides which bind to an infective stage microorganism and damage said microorganism. As amended claim 1 recites:

1. (Amended) A method for identifying an antimicrobial peptide which binds to an infective stage microorganism and damages said microorganism comprising
 - (a) contacting an infective stage microorganism with a plurality of non-identical peptides,
 - (b) identifying peptides that bind to the microorganism, and
 - (c) assaying the peptides identified in (b) for capacity to damage the microorganism,
wherein damage to said microorganism by a peptide of (c) indicates that the peptide of (c) is an antimicrobial peptide, which binds to an infective stage microorganism and damages said microorganism.

Each step of the claimed method, and the method as a whole, is enabled by the specification; see e.g., Example 2 wherein three phage display libraries, each presenting a plurality of non-identical peptides, were contacted with sporozoites (an infective stage microorganism); This corresponds to and enables claim 1, step (a). The unbound phage were washed away, and the bound phage particles,

each displaying a peptide, were collected and the displayed peptides were identified; This corresponds to and enables claim 1, step (b). In Example 3 the specification discloses how the identified peptides are assayed for those that had the ability to damage the microorganisms; This corresponds to and enables claim 1, step (c).

One of skill in the art would appreciate that any plurality of peptides could be subjected to the claimed method to identify peptides that bind to the infective stage microorganisms and to identify those that bind to the microorganism for their ability to damage the microorganism. Thus a person skilled in the pertinent art, with applicants disclosure in hand and using the knowledge available to such a person could readily make and use the invention without undue experimentation: As such the specification fully enables claim 1. In view of the amendments to the claims and the forgoing remarks, applicants respectfully request that the Examiner reconsider and withdraw the rejection of the claims.

Claims 1-4 and 24 are objected to under 35 U.S.C. § 112, second paragraph for purportedly being unclear. The Examiner contends that the metes and bounds of the term "plurality of peptides" can not be determined. The Examiner contends that it is unclear if the plurality of peptides relates to many of the same peptides or many peptides from different origins.

Applicants have amended claim 1 to make clear that the plurality of peptides is a plurality of non-identical peptides. Support for this amendment is found, e.g., in Example 2 wherein the infective microorganisms were contacted with three different phage display libraries, which comprise a plurality of non-identical peptides.

Claim 24 as amended depends upon allowed claim 5. As amended claim 24 relates to a method that uses the isolated peptide of claim 5 which displays a particular sequence motif and which the Examiner has allowed. Support for this amendment is found e.g. on page 7, lines 5-14 and on page 45, line 18 to page 47, line 2.

The Examiner also notes a typographical error in claim 1, which the Examiner contends renders the claim indefinite. Applicants have amended the third subsection of claim 1 such that it is consistent with the other subsections. As amended the third subsection is identified as "(c)" rather than "3".

In view of the amendment of the claims applicants respectfully request that the objection to claims 1-4 and 24 under 35 U.S.C. §112, second paragraph be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 06-2375.

Dated: July 2, 2003

Respectfully submitted,

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